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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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FALLS CHURCH, VA 22041

EXAMINER

TRAN, TUAN A

ART UNIT	PAPER NUMBER
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2618

DATE MAILED: 11/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/628,272

Applicant(s)

HONG, CHU-CHAI

Examiner

Tuan A. Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-20 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-3, 5 and 7-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dyer et al. (6,978,163) in view of Banh et al. (6,526,294) and Yamaguchi et al. (2005/0085276).

Regarding claim 1, Dyer discloses a Bluetooth hands-free kit structure (See fig. 10), comprising: a Bluetooth earphone 310 (See fig. 9), whose interior circuit includes a Bluetooth module, an antenna, a battery, an earpiece 985, a microphone 990, a first connecting member 975, and a voice decode (wireless earphone or headset is widely known in the art to include voice decoder in order to reproduce received RF signal into sounds), which can proceed with radio signal transmission to a corresponding Bluetooth chip constructed on mobile phone (See fig. 9 and col. 1 lines 11-19, col. 5 lines 14-47); a stand (See fig. 10), whose interior circuit includes a second connecting member 955, a power connecting member 930, a DC convert circuit 910, and a voltage regulator (charger is widely known in the art to include voltage regulator in order to provide stable and correct charging voltage such as 3.7V or 5V to devices to be charged from the external power supply of 12V such as vehicle battery), wherein the stand and the

Bluetooth earphone form an electrical connection through the first connecting member 975 and the second connecting member 955 to provide power and charging while transmitting (See figs. 9-10 and col. 5 lines 14-64). However, Dyer does not explicitly mention that the Bluetooth earphone includes a voltage regulator, the stand includes an audio output amplification circuit, and an integration of audio output apparatus including a fourth connecting member and audio output device (speaker) wherein the fourth connecting member of the apparatus is connected with a third connecting member of the stand via wired interface so that vocal signals of the stand can be regulated and magnified by ways of the audio output device (speaker). Banh teaches a wireless earphone comprising a voltage regulator 38 (See figs. 1-2 and col. 2 lines 40-54, col. 4 lines 8-40). Yamaguchi teaches a mobile phone cradle (See fig. 1) comprising an audio output amplification circuit 16 wherein the amplification circuit including a third connecting member connected with a fourth connecting member of an integration of audio output apparatus including audio output device (speaker) 13, 14 so that vocal signals of the stand can be regulated and magnified by ways of the audio output device (speaker) (See figs. 1-2, 16 and page 3 [0041], page 5 [0084]). Since both Dyer and Yamaguchi teach about charger holder for wireless electronic devices; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Yamaguchi in configuring the stand, as disclosed by Dyer, with the audio output amplification circuit as well as the audio output apparatus for the advantage of allowing users to conduct voice communications while charging devices such as headset and/or its associated handset. Also, it would have been

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obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Banh in configuring the earphone with a voltage regulator for the advantage of providing correct and stable charging voltage.

Regarding claim 2, Dyer & Banh & Yamaguchi disclose as cited in claim 1.

However, they do not mention that the earphone or the stand includes an echo cancellation circuit. Since Official Notice taken by the Examiner cites that earphone (headset) or stand (holder or cradle) comprises echo canceller is common in the art; therefore, it would have been obvious to one skilled in the art to configure the earphone or the stand with an echo canceller for the advantage of eliminating noise to produce better sound quality.

Regarding claims 3 and 5, Dyer & Banh & Yamaguchi disclose as cited in claim 1. However, they do not mention that the third connecting member is a socket and the fourth connecting member is a plug. Since socket and plug are well known types of connectors to connect audio devices with external speakers; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use socket and plug for connection between the stand and external speakers for the advantage of expanding the capability of the system to various types of connector as well as accommodating the designer's intention.

Regarding claim 7, Dyer & Banh & Yamaguchi disclose as cited in claim 1. Banh further discloses the battery is in tandem with a diode protection circuit (See fig. 2).

Regarding claim 8, Dyer & Banh & Yamaguchi disclose as cited in claim 1. Dyer further discloses the interior of the stand includes a charging circuit that can charge the internal battery of the Bluetooth earphone (See fig. 9 and col. 5 lines 14-27).

Regarding claim 9, Dyer & Banh & Yamaguchi disclose as cited in claim 1. Yamaguchi further discloses the audio output device is a loud speaker (See fig. 3 and page 3 [0044]).

Regarding claims 10-11, Dyer & Banh & Yamaguchi disclose as cited in claim 1. Yamaguchi further discloses the audio output amplification circuit comprises a volume regulation circuit and the audio output device is acoustic type muting control system (the speaker can be muted when the volume is set to zero value) (See fig. 11 and page 5 [0073-0076]).

Regarding claims 12-13, Dyer & Banh & Yamaguchi disclose as cited in claim 1. Dyer further discloses the power connecting member 930 is a socket or a contact terminal (See fig. 9).

Regarding claims 14 and 16, Dyer & Banh & Yamaguchi disclose as cited in claim 1. However they do not mention that the first connecting member is a socket and the second connecting member is a plug. Since socket and plug are well known types of connectors; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use socket and plug for connection between the earphone and the stand for the advantage of expanding the capability of the system to various types of connector as well as accommodating the designer's intention.

Regarding claims 15 and 17, Dyer & Banh & Yamaguchi disclose as cited in claim 1. Dyer further discloses the first and second connecting members 970, 955 are contact terminals (See fig. 9).

Regarding claim 18, Dyer & Banh & Yamaguchi disclose as cited in claim 1. Dyer further discloses the structure includes one headset 310, wherein the headset 310 includes only one Bluetooth module 980 (See fig. 9).

Regarding claims 19-20, Dyer & Banh & Yamaguchi disclose as cited in claim 1. However, they do not explicitly mention that audio signals outputted by the headset being transferred to the audio output of the stand, wherein the transfer is being trigger only when the headset is docking with the stand. Since Yamaguchi does teach that audio signals outputted by the handset being transferred to the audio output of the stand, wherein the transfer is being trigger only when the handset is docking with the stand (See fig. 16 and page 5 [0084-0089]); therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the stand such that audio signals outputted by the headset being transferred to the stand when the headset is docking with the stand for the advantage of allowing the user to conduct hand-free communication while recharging both of the handset and headset.

Response to Arguments

Applicant's arguments filed 08/16/2006 have been fully considered but they are not persuasive.

The Applicant repeatedly argued through out the Applicant's argument that the claimed structure includes only one Bluetooth transceiver for the earphone, wherein the cited prior arts in combination show the structure having two Bluetooth transceivers for both the headset and the charger (cradle) (See Remark, pages 5-10). The Examiner respectfully disagrees with the Applicant because such limitation is not in the claims (claims 1-18) and further the claim language is not narrow enough to prevent the charger (or cradle) from comprising a Bluetooth transceiver for conducting wireless communication with the headset. In addition, "Bluetooth module", as defined in claim 1, is in the earphone (headset) and Dyer does show the headset 310 comprises only one Bluetooth module 980 (See fig. 9)

The Applicant argued the prior arts, individually or in combination, fail to show that the audio signals outputted by the headset being transferred to the audio output of the charger (cradle), wherein the transfer being triggered by docking the headset with the charger as cited in recently submitted new claims (See Remark, pages 5-10). The Examiner agrees that the prior arts do not mention such limitation. However, since Yamaguchi does teach that audio signals outputted by the handset being transferred to the audio output of the stand, wherein the transfer is being trigger only when the handset is docking with the stand (See fig. 16 and page 5 [0084-0089]); therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the stand such that audio signals outputted by the headset being transferred to the stand when the headset is docking with the stand for the advantage of

allowing the user to conduct hand-free communication while recharging both of the handset and headset.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A. Tran whose telephone number is (571) 272-7858. The examiner can normally be reached on Mon-Fri, 10:00AM-6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Tuan Tran



Matthew D. Anderson
SPE - 2618